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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/701,787

11/04/2003

James O. Bechler

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EXAMINER

TRAN, LY T

ART UNIT

PAPER NUMBER

2853

MAIL DATE

DELIVERY MODE

07/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/701,787

Applicant(s)

BEEHLER, JAMES O.

Examiner

Ly T. TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on RCE filed 5/23/07.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 7-13, 18-21 and 24-33 is/are pending in the application.
- 4a) Of the above claim(s) 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-13, 18-21 and 24-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/23/07 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 7-13, 18-21, 24-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (JP 08156351) in view of Ishii (US 2003/0085980)

With respect to claims 1, 18, 25 and 29-30, Sato discloses an apparatus and a method for supporting a media sheet comprising:

- A print engine (fig.1: element 18)
- A negative pressure source (element 19)

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- A platen (element 10) operatively coupled to the negative pressure source and disposed adjacent the print engine, the platen including:
  - A contact surface (Fig.6)
  - A channel (element 21a) defining in the contact surface and extending a length, the channel having a varying cross sectional area along at least a portion of the length
  - An air passage (element 21a1) extending from the channel to deliver negative pressure to the channel
- Positioning a back surface of a media against a portion of a contact surface of a platen (Fig.1)
- Establishing negative pressure through an air passage extending from a channel defined in the contact surface, having a length of the channel to suction the media sheet to the a contact surface of the platen (fig.1)

With respect to claims 2, 19 and 28, Sato discloses the varying cross sectional area comprises a tapered portion in the channel (Fig.6: element 21a).

With respect to claims 3 and 20, Sato discloses the tapered portion comprises multiple tapered portions along the length of the channel (element 21a).

With respect to claims 4 and 21, Sato discloses the varying cross sectional area comprises varying a width of the channel (element 21a).

With respect to claims 7 and 24, Sato discloses the air passage (element 21a1) extends from the channel at a tilted orientation configured to reduce friction.

With respect to claim 8, Sato discloses the air passage comprises first air passages extending from the first array of the channel and the second air passage extending from the second array of the channel (element 21a1).

With respect to claim 10, Sato discloses the channel comprises an elongated recess (21a) defined in the contact surface and extending transverse from the channel

With respect to claim 11, Sato discloses the channel comprises an array of channels extending substantially parallel to each other (fig.6: half of channel from left to right is a first array, and other half is a second array)

With respect to claim 12, the channel comprises a first array of channels and a second array of channels, the first array of the channels extending substantially parallel to each other and the second array of the channels extending substantially parallel to each other (fig.6).

With respect to claim 26, Sato discloses positioning the media sheet to leave an exposed channel portion, uncovered by the media sheet, to suction the media to the contact surface of the platen (Fig.2).

With respect to claim 31-33, Sato discloses the air passage is confined to the first end of the channel (fig.6: element 21a1)

Sato fails to teach the channel having a varying depth of the channel along at least a portion of the length and the air passage extends from a first end portion of the channel with a second end portion of the channel having a smaller cross sectional than the first end portion and a channel interconnecting and longitudinally extending between

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the at least one of the channels in the first array and at least one of the channels in the second array having a common longitudinal axis.

Ishii teaches teach the channel having a varying a depth of the channel along at least a portion of the length and the air passage extends from a first end portion of the channel with a second end portion of the channel having a smaller cross sectional than the first end portion ((Column 10: [0128] [0129], Fig.14A, 14B) and a channel interconnecting and longitudinally extending between the at least one of the channels in the first array and at least one of the channels in the second array having a common longitudinal axis. (Fig.8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary a depth of the channel along at least a portion of the length a cross sectional channel as taught by Ishii. The motivation of doing so is to increase the flow velocity of flowing air so that the negative pressure is raised. Thus, it is possible to seize an opportunity to take the recording medium into the suction chamber and the amount of extension generated by the cockling can be compensated.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-Th:6:30 AM-3:00PM or IFP, Friday: work from home.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LT

June 29, 2007

A handwritten signature in black ink, appearing to read 'Stephen Meier', with a stylized horizontal stroke extending to the right.

**STEPHEN MEIER**  
**SUPERVISORY PATENT EXAMINER**